

Score _____/50

E-mail: _____

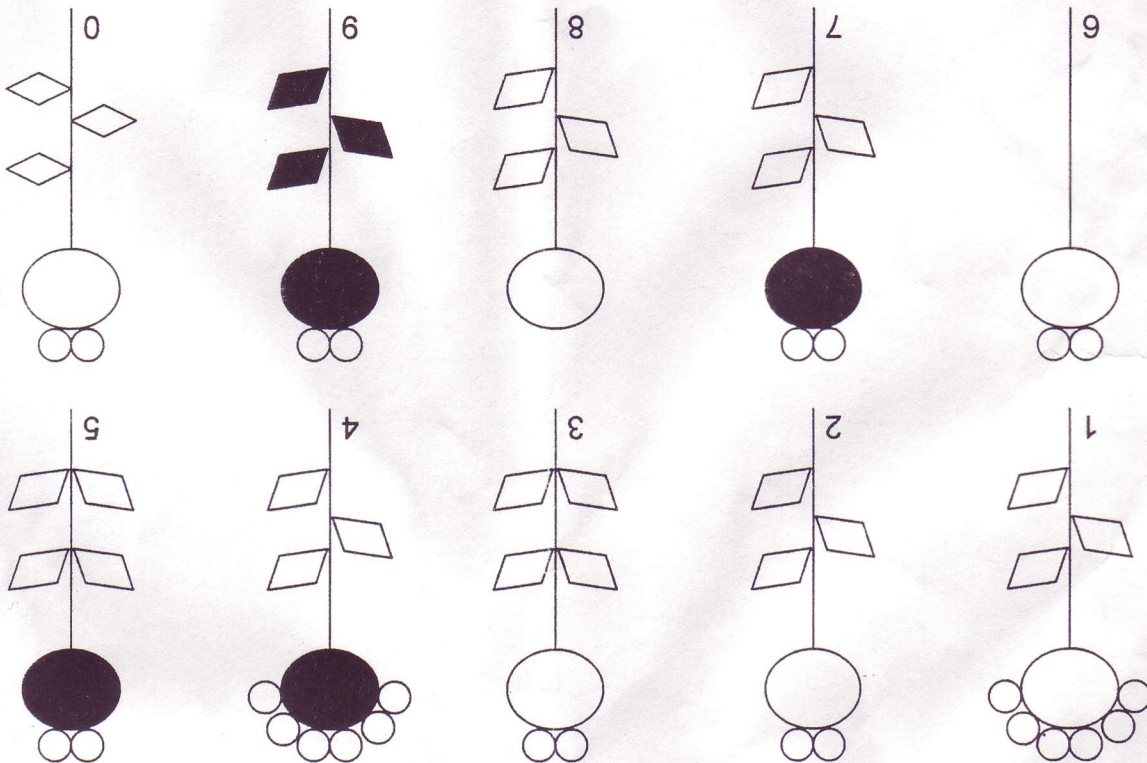
Answer the following questions on separate sheets of paper. **DO NOT HAND WRITE ANSWERS.** You may draw you cladogram, but all other answers must be typed. You may use any resource (book, internet, library etc.) however discussing this exam with classmates is prohibited. **Cheating will result in an 'F' for the assignment (instructors discussion).**

1. Define the following, cladistics, phenetics, systematics, monophyletic, polyphyletic, ingroup, outgroup, derived character, primitive character, cladogram, homoplas, convergent evolution, heterochrony, allometry, evolutionary fitness, natural selection, genetic drift, micro-evolution, macroevolution, speciation, homology, analogy.

2. The definition of species varies among different schools of thought, discuss (compare and contrast), to concepts.

3. What did Darwin mean when he used the term "descent with modification"?

4. What is the difference between the theory of Gradualism and Punctuated equilibrium?



*5. Using the information you have gained, Arrange the following hypothetical organisms in a cladistic tree. At each branch describe traits specific to each monophyly.

*6. Write a chart or paragraph describing the classification, primitive and derived characteristics, homologies, and potential convergent evolution.